

WE CLAIM AS OUR INVENTION:

1. A method for positioning a patient in a medical device having a treatment unit adapted to receive a patient therein, a computer, and a patient bed, adapted to receive a patient thereon, movable in at least one plane relative to said treatment unit, said method comprising the steps of:

with an image-recording device, acquiring an image of an exterior of the patient on the patient bed and displaying said image on a display screen connected to said computer;

providing said information to said computer identifying a spatial correlation between a coordinate system of the treatment unit and said image-recording device; and

by executing an image processing program in said computer, detecting a body region of the patient by analyzing said image and automatically displaying a suggested scan area on said display screen covering said body region.

2. A method as claimed in claim 1 comprising, in said image processing program, detecting two different body regions of the patient by analyzing said image and, for each of said different body regions, and automatically displaying a suggested scan area on said display screen covering that body region.

3. A method as claimed in claim 1 comprising optically emphasizing the detected body region on said display screen.

4. A method as claimed in claim 1 comprising manually entering a designation into said computer of said body region to be detected by said image processing program.

5. A method as claimed in claim 4 comprising entering said designation of said body region to be detected into said computer using a displayed menu.

6. A method as claimed in claim 4 comprising entering said designation of said body region to be detected into said computer by operating a keypad connected to said computer.

7. A method as claimed in claim 4 comprising allowing selection by a user of multiple body regions to be detected simultaneously.

8. A method as claimed in claim 1 comprising allowing manual alteration of the suggested scan area displayed on said display screen by said image processing program.

9. A method as claimed in claim 1 comprising designating said suggested scan area on said display screen with two lines respectively disposed at edges of said suggested scan area.

10. A method as claimed in claim 9 comprising designating said suggested scan area on said display screen with two parallel lines at the respective edges of the suggested scan area.

11. A method as claimed in claim 1 wherein said image-recording device is a first image-recording device and wherein said image is a first image, and comprising the additional steps of:

acquiring a second image of the patient on the patient bed with a second image-recording device, having a recording axis that is independent of a recording axis of said first image-recording device, and displaying said second image on said display screen connected to said computer;

providing information to said computer identifying a spatial correlation between the coordinate system of the treatment unit and said second image-recording device; and

with said image processing program in said computer, displaying said suggested scan area in each of said first and second images.

12. A method as claimed in claim 11 comprising disposing said first and second image-recording devices relative to each other with the respective recording axes thereof being orthogonal to each other.

13. A method as claimed in claim 1 wherein said patient bed is movable in a plurality of movement planes relative to said treatment unit, and comprising the additional steps of:

for each movement plane, acquiring an image of the patient on the patient bed in that movement plane and displaying the respective images on said display screen;

providing information to said computer identifying a spatial correlation between the coordinate system of the treatment unit and each of said image-recording devices; and

with said image processing program displaying said suggested scan area in each of said images on said display screen.

14. An arrangement for positioning a patient in a medical device having a treatment unit adapted to receive a patient therein, and a patient bed, adapted to receive a patient thereon, movable in at least one plane relative to said treatment unit, said arrangement comprising:

a computer;

an image-recording device for acquiring an image of an exterior of the patient on the patient bed and displaying said image on a display screen connected to said computer;

said computer containing information identifying a spatial correlation between a coordinate system of the treatment unit and said image-recording device; and

wherein said computer detects a body region of the patient by analyzing said image and automatically displaying a suggested scan area on said displays screen covering said body region.

15. An arrangement as claimed in claim 14 wherein said computer detects two different body regions of the patient by analyzing said image and, for each of said different body regions, automatically displays a suggested scan area on said display screen covering that body region.

16. An arrangement as claimed in claim 14 wherein said computer optically emphasizes the detected body region on said display screen.

17. An arrangement as claimed in claim 14 comprising an input unit allowing manual entry of a designation into said computer of said body region to be detected by said computer.

18. An arrangement as claimed in claim 17 wherein said input unit is a displayed menu.

19. An arrangement as claimed in claim 17 wherein said input unit is a keypad connected to said computer.

20. An arrangement as claimed in claim 17 wherein said input unit allows selection by a user of multiple body regions to be detected simultaneously.

21. An arrangement as claimed in claim 14 comprising an input unit allowing manual alteration of the suggested scan area displayed on said display screen by said computer.

22. An arrangement as claimed in claim 14 wherein said computer designates said suggested scan area on said display screen with two lines respectively disposed at edges of said suggested scan area.

23. An arrangement as claimed in claim 22 wherein said computer designates said suggested scan area on said display screen with two parallel lines at the respective edges of the suggested scan area.

24. An arrangement as claimed in claim 14 wherein said image-recording device is a first image-recording device and wherein said image is a first image, and comprising:

a second image recording device which acquires a second image of the patient on the patient bed, said second image recording device having a recording axis that is independent of a recording axis of said first image-recording device, and which displays said second image on said display screen connected to said computer;

wherein said computer contains information identifying a spatial correlation between the coordinate system of the treatment unit and said second image-recording device; and

wherein said computer displays said suggested scan area in each of said first and second images.

25. An arrangement as claimed in claim 24 wherein said first and second image-recording devices are disposed relative to each other with the respective recording axes thereof being orthogonal to each other.

26. An arrangement as claimed in claim 14 wherein said patient bed is movable in a plurality of movement planes relative to said treatment unit, and comprising the additional steps of:

for each movement plane, an image recording device that acquires an image of the patient on the patient bed in that movement plane and displays the respective image on said display screen;

and wherein said computer contains information identifying a spatial correlation between the coordinate system of the treatment unit and each of said image-recording devices; and

wherein said computer displays said suggested scan area in each of said images on said display screen.